

AMENDMENTS TO THE CLAIMS

Please replace all prior versions, and listings, of claims in the application with the following list of claims, in which insertions are indicated by underlining and deletions are indicated by strikeouts or double bracketing.

1-62. (Cancelled)

63. (Currently Amended) An isolated nucleic acid molecule selected from the group consisting of

(a) a nucleic acid molecule which hybridizes under stringent conditions at 65°C in hybridization buffer, washing at room temperature with 0.15M sodium chloride, 0.015M sodium citrate, pH 7 (SSC) and at 68°C with 0.1-0.5 x SSC, 0.1 sodium dodecyl sulphate to a nucleic acid molecule having a sequence of SEQ ID NO:2; and thereby spans a region corresponding to nucleotides 23 and 29 of SEQ ID NO:2, has an addition, deletion or substitution of at least two nucleotides in a region corresponding to in a TATTT sequence when compared to SEQ ID NO:2 ~~between and including nucleotides 24 and 28 of SEQ ID NO:2,~~ is at least 48 nucleotides in length, and enhances production of poly-N-acetyl glucosamine when operably linked to an *ica* nucleic acid comprising nucleotides 2330-5745 of SEQ ID NO:3 that encode IcaA, IcaD, IcaB and IcaC, relative to the level of poly-N-acetyl glucosamine produced when SEQ ID NO:2 is operably linked to the *ica* nucleic acid, ~~or~~ and

(b) a complement thereof.

64-68. (Cancelled)

69. (Previously Presented) An expression vector comprising the isolated nucleic acid molecule of claim 63, operably linked to an *ica* nucleic acid.

70. (Original) A host cell transformed or transfected with the expression vector of claim 69.

71. (Previously Presented) An isolated nucleic acid molecule selected from the group consisting of
- (a) a fragment of a nucleic acid molecule consisting of a sequence of SEQ ID NO:1, and
 - (b) complements of (a),

wherein the fragment spans nucleotides 23 and 24 of SEQ ID NO:1, is at least 48 nucleotides in length, and enhances production of poly-N-acetyl glucosamine when operably linked to an *ica* nucleic acid comprising nucleotides 2330-5745 of SEQ ID NO:3 that encode IcaA, IcaD, IcaB and IcaC, relative to the level of poly-N-acetyl glucosamine produced when SEQ ID NO:2 is operably linked to the *ica* nucleic acid.

72-133. (Cancelled)

134. (Previously Presented) The isolated nucleic acid molecule of claim 63, wherein the isolated nucleic acid molecule consists of a sequence of SEQ ID NO:1.

135. (Previously Presented) The isolated nucleic acid molecule of claim 63, wherein the isolated nucleic acid molecule comprises a nucleotide sequence between and including nucleotides 9 and 38 of SEQ ID NO:1.

136. (Currently Amended) The isolated nucleic acid molecule of claim 63, wherein the isolated nucleic acid molecule comprises a deletion, addition or substitution of at least three, at least four or at least five nucleotides ~~in the region between and including nucleotides 24 and 28 of SEQ ID NO:2~~ in the TATTT sequence.

137. (Currently Amended) The isolated nucleic acid molecule of claim 63, wherein the isolated nucleic acid molecule comprises a five nucleotide non-wildtype substitution ~~between and including nucleotides 24 and 28 of SEQ ID NO:2~~ of the TATTT sequence.

138. (Previously Presented) The isolated nucleic acid molecule of claim 137, wherein the five nucleotide non-wildtype substitution has a sequence of ATAAA.

139. (Previously Presented) The isolated nucleic acid molecule of claim 71, wherein the fragment has a nucleotide sequence between and including nucleotides 9 and 38 of SEQ ID NO:1.

140. (Cancelled)

141. (New) An isolated nucleic acid molecule, selected from the group consisting of

a) a nucleic acid molecule which

(i) has a sequence which varies from the sequence of SEQ ID NO:2 by having an addition, deletion or substitution of at least two nucleotides between and including nucleotides 24 and 28 of SEQ ID NO: 2, and which is at least 48 nucleotides in length, and

(ii) enhances production of poly-N-acetyl glucosamine when operably linked to an *ica* nucleic acid comprising nucleotides 2330-5745 of SEQ ID NO:3 that encode IcaA, IcaD, IcaB and IcaC, relative to the level of poly-N-acetyl glucosamine produced when SEQ ID NO:2 is operably linked to the *ica* nucleic acid, and

b) a complement thereof.

142. (New) An isolated nucleic acid molecule comprising a nucleotide sequence of SEQ ID NO:1.

143. (New) An isolated nucleic acid molecule consisting of a nucleotide sequence of SEQ ID NO:1.

144. (New) A method of making a polysaccharide over-producing bacterium comprising introducing into a bacterium an *ica* nucleic acid operably linked to an *ica* regulatory nucleic acid,

wherein the *ica* regulatory nucleic acid is the isolated nucleic acid molecule of claim 63, 71, 141, 142 or 143.

145. (New) A recombinant polysaccharide over-producing bacterium comprising an *ica* nucleic acid operably linked to an *ica* regulatory nucleic acid,
wherein the *ica* regulatory nucleic acid is the isolated nucleic acid molecule of claim 63, 71, 141, 142 or 143, and wherein the bacterium is not MN8m.
146. (New) A method of producing a bacterial polysaccharide comprising
culturing the polysaccharide over-producing bacterium of claim 145 in a growth medium,
and
harvesting the bacterial polysaccharide from the culture.
147. (New) A method of over-producing a protein in a bacterium comprising
introducing into a bacterium a nucleic acid operably linked to an *ica* regulatory nucleic acid,
wherein the *ica* regulatory nucleic acid is the isolated nucleic acid of claim 63, 71, 141, 142 or 143, and wherein the nucleic acid encodes a protein to be over-produced.